

# Work Order ID 106510

\*106510\*

Page 1

Thursday, September 05, 2013 8:03:57 AM

Item ID: D4008-9 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Spring  
 Start Date: 9/5/2013 Start Qty: 20.00 \*20\* Cust Item ID:  
 Required Date: 9/13/2013 Req'd Qty: 20.00 \*20\* Customer:

## Reference:

Approvals: Process Plan: CL Date: 13/09/05 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_  
 Run Start \*NR1\*  
 Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4008	C								

100

0.00

\*100\*

Purchasing

Purchasing

### Memo

Issue P/O: 21228  
 Purchase Part Number: 206-031-140-001  
 Supplier: BELL HELICOPTER  
 Certificate of conformity is required

0.00

CL 13/09/06 20

110

Receive & Inspect for Damage & Mat'l Certs

0.00

\*110\*

Packaging

Packaging

### Memo

0.00

CL 13/9/17 (21)

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Thermoforming <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Crosstube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/>            Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/>            Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Quality <input type="checkbox"/>            Other <input type="checkbox"/> </div> </div>
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabelled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

Work Order ID 106510

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Page 2

Thursday, September 05, 2013 8:03:57 AM

Item ID: D4008-9 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Spring  
 Start Date: 9/5/2013 Start Qty: 20.00 \*20\* Cust Item ID:  
 Required Date: 9/13/2013 Req'd Qty: 20.00 \*20\* Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp., Stamp
120 *120* QC Quality Control	QC6- Inspect dimensions to drawing  Memo	0.00 0.00							
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>GA</u>  Memo	0.00 0.00							
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00 0.00							

21x (DAS 28) 13-09-18  
 MJ 13-09-18  
 13-09-18

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data									
Equip/Tooling									
Operator									
Material									
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

**FAULT CATEGORY**

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

# Picklist Print

Thursday, September 05, 2013 8:03:57 AM

Page 1

Work Order ID: 106510

Parent Item: D4008-9

Parent Item Name: Spring

Start Date: 9/5/2013

Required Date: 9/13/2013

Start Qty: 20.00

Required Qty: 20.00

Comments: IPP rev A 09.12.23 new Issue Prelim EC verified by: DD IPP Rev:B 10.05.03 as per ECN10-562 DD verified by:EC IPP REV:C 12.03.07 AS PER DWG REV.C DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<del>206-031-140-001</del> Splash Guard		Purchased	No			110	Each	0.0000	1	20			

D4008-9P <sup>CL</sup>

9/13/13 (21)

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

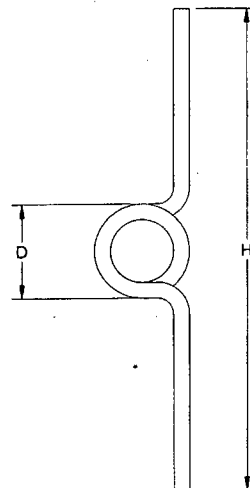
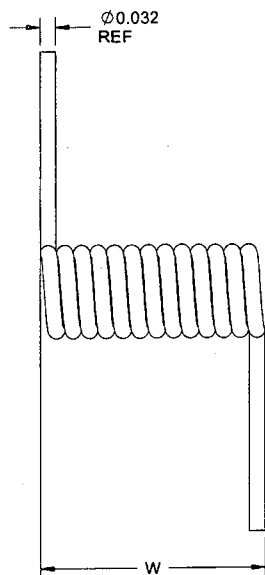
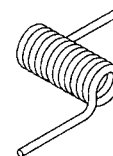
Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Material									
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Supplier									
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		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

## SPECIFICATION CONTROL DRAWING



௨௩/௦௭/௦௫  
 வ/ப: 106510

**D4008-X SPRING**

RELEASED  
2012-03-02  
MP

NOTES:

- 1) MATERIAL: T301 OR 304 STAINLESS STEEL SPRING WIRE  $\phi$ 0.032 PER ASTM A313
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.00 lbs

DESIGN	<i>JE</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA  DRAWING NO. <b>D4008</b>  TITLE <b>SPLASH GUARD</b>  COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRINTED IS SUPPLIED ON THE EXPRESS CONSENT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR ON OR IN CONNECTION TO ANY OTHER PERSON OR THING	REV. C
DRAWN	<i>JE</i>		SHEET 9 OF 10
CHECKED	<i>JE</i>		SCALE
MFG. APPR.	<i>JE</i>		NTS
APPROVED	<i>JE</i>		
DE APPR.	<i>JE</i>		
DATE	12.01.17		



Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO21228**

Purchase Order Date 9/6/2013

PO Print Date 9/6/2013

Page Number 1 of 1

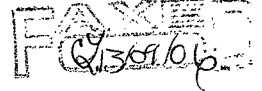
**Order From :**

VC-VIC002

**Ship To :** DART AEROSPACE LTD

VICTORY SPRING LTD.  
#2 6104 - 82 AVE.  
EDMONTON, AB T6B 0E7  
CA

1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA



**Contact Name**

**Vendor Phone** 866 230 5312

**Buyer**

Chantal Lavoie

**Customer POID**

**Customer Tax #**

10127-2607

**Ship To Contact**

**Terms**

Net 30

**Ship To Phone**

**Currency**

CAD

**Ship Via:**

FedEx PI collect

**FOB**

Destination-Collect

**Ship Acct:**

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	D4008-9P  AS PER DWG D4008 REV.C B106510	Spring	9/13/2013 Yes 9/13/2013		20.00 Each	\$7.44	\$148.80

*See 21*

**Line Total:** \$148.80

**PO Total:** \$148.80

**Note:** Pricing listed above is as per contract agreement between Dart Aerospace and the respective manufacturer.  
No substitution or deviation without consent.  
Certificate of Conformity or Material Certification required - **(YES)** NO  
PST# 6122-5207

Change Nbr: 1

Change Date: 9/6/2013





# PACKING SLIP

27963

#2, 6104 - 82 Ave  
Edmonton, AB T6B 0E7  
t + 780 442 4020  
f + 780 466 8000

BILL TO: Dart Aerospace Ltd  
1270 Aberdeen Street  
Hawkesbury, ON K6A, 1K7

SHIP TO:

DATE		ORDER No.		SHIP VIA	
16-Sep-13		PO21225		FedEx P1 Collect	
QUANTITY	DESCRIPTION			UNIT	AMOUNT
21	D4008-9P Torsion Spring				
GST.#	TERMS	SUBTOTAL	FREIGHT	GST	TOTAL
854454527	NET 30 DAYS				

## CERTIFICATE OF CONFORMANCE

REPORT FOR : Dart Aerospace Ltd	DATE: 9/16/2013
PART/DRAWING #: D4008-9P	PO # PO21228
DESCR: Torsion Spring	QUANTITY: 21

CHARACTERISTIC	SPECIFIED	MEASURED	NOTES
Material type	SS 302	Yes	
Material diameter	0.035	0.035	
Coil I.D.			
Coil O.D.	0.19	0.196	
Width	0.46	0.46	
Free Length	0.99	0.99 - 1.030	
Helix	RHW	RHW	
End Type			

### COMMENTS

*DAS*  
*27*  
*9-8*

Mill Certificate attached: no  
Material Heat Number: no

Inspected by: